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Action at the exhibit face: video and the analysis of social interaction in museums and galleries

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Action at the exhibit face: video and the analysis of social interaction in museums and galleries

Abstract

Whilst we can observe a considerable increase in importance of arts and museum marketing, research of people’s engagement with art in exhibitions is relatively rare. This neglect of people’s action and interaction in exhibitions is somewhat surprising considering that it is in exhibitions where museums are in direct contact with their audience. This paper begins with a review of the emergence of video-based research in the social sciences before turning to the use of video for the study of visitor behaviour in exhibitions. It contributes to recent debates on experiential and sensory marketing by examining three video-recorded fragments of interactions at exhibits in museums. The analysis of the fragments suggests that people’s experience of exhibits arises in social interaction with others. The paper ends with a discussion of the theoretical and methodological contribution of video-based research in museums and of implications of such research for those involved in the management and design of museums and other experiential environments.

Keywords: experience, museum marketing, experiential marketing, multisensory, social interaction, video.

Introduction

Museums have been founded as institutions that collect, conserve and exhibit museum objects (Waidacher, 1996). Those managing and funding museums today, though increasingly feel that these functions do not suffice to justify the financial resources spent on the maintenance of large buildings and the renovation of exhibitions. Over the past 20 years or so, they have turned to education and the learning sciences to show that learning is taking place in museums (Falk & Dierking, 1992, 2000). They have deployed new and novel tools and technologies to enhance people's engagement with and learning from exhibits and exhibitions (Parry, 2010).

Museum manager's concern with the creation of exhibitions that facilitate cognitive development and learning coincides with the recent interest in "experiential marketing" (Schmitt, 1999) and "sensory marketing" (Hultén, 2015) and the creation of shopping and retail environments that facilitate long-lasting experiences (Caru & Cova, 2006). It therefore is not surprising that marketing and consumer research has a strong interest in multisensory settings, such as museums and other cultural domains (Goulding, 1999; Kerrigan, 2010; Kerrigan, Fraser, & Ozbilgin 2004; O'Reilly & Kerrigan 2010). Studies in this area, for example, explore people's experience of exhibitions and cultural events by using qualitative interviews or surveys (Goulding, 1999, 2000; Prentice, Witt, & Hamer, 1998).

In recent years, interview-based research has been criticised for "the attitudinal fallacy" by mistaking self-reports for actual behaviour (Jerolmack & Khan, 2014). We do not entirely agree with Jerolmack and Khan's argument against interviews. However, we do concur with them that by giving preference to interviews and surveys to reveal people's orientation to situations research has neglected to investigate the processes of action and interaction through which such orientations and attitudes as well as people's experience of situations, objects and events arises. In our research, therefore, we use video-recording, often supplemented by field observation, to explore naturally occurring action and interaction in exhibitions.

Although Hirschman (1986) criticised the use of video for ethical and practical reasons over the past 30 years the use of visual data and video-recording as data for marketing and consumer research has become increasingly common (cf., Belk &

Kozinets, 2005; Berger, 2015; Schroeder, 2005). Whilst some suggested to use video-recordings as data to triangulate other kinds of data (Wallendorf & Belk, 1989) video increasingly has been used to track shoppers in retail environments as well as to enhance ethnographic field observation (Belk, Sherry, & Wallendorf, 1988; vom Lehn, 2014b). There also is a relatively small body of studies concerned with action and interaction in formal and informal shopping and retail settings that uses video-recordings as principal data. Clark and colleagues, for example, have undertaken a range of video-based studies that explore how sales personnel establish rapport with consumers, how they manage resistance and object to offers or how they assess different states of shoppers' interest in products (Clark, Drew, & Pinch, 1994; Clark & Pinch, 2009). In a related way, Llewellyn (2011) has explored interaction at counters in museums to reveal how sales personnel manages to elicit a donation ("gift aid") from customers, and together with Burrow (2008) he has examined video-recording of street-vendors' interaction with passers-by to investigate how they pursue sales.

This paper will draw on this emerging body of marketing and consumer research as well as on sociological studies of interaction in retail settings to discuss how the analysis of video-recorded interaction in museums can contribute to marketing and consumer researchers' understanding of the interactional emergence of the experience of exhibits. The paper will conclude with a discussion of the contribution of video-based studies to marketing and consumer research both in museums and elsewhere, and make some suggestions on how findings from such studies can contribute to consumer and marketing research and practice in museums and retail settings.

The Curious Neglect of Video in Visitor Research

From the emergence of photography and the ability to record images and later sound, there was an interest in using the technology to document and analyse human behaviour. Building on their pioneering studies of the movement of animals, Eadweard Muybridge in collaboration with Leland Stanford used an early form of film to examine human action and interaction and towards the late C19th we find film recording featuring in a number of anthropological expeditions – the most well known of which is A.C Haddon's studies of the Trobriand Island communities (Banks & Morphy, 1999; Heath, Hindmarsh, & Luff, 2010).

These initiatives led to a burgeoning corpus of research in the social sciences that used photography and film to examine human behaviour, including for instance, Gilman's (1916) research into the physical demands placed on visitors in examining exhibits in museums and galleries and many years later, Shettel's (1976) studies of how people responded to particular exhibits, their power of attraction, in science exhibitions. Since these early initiatives, we have witnessed the emergence of video, a cheap and reliable technology that enables the relatively unobtrusive recording of the visible and audible aspects of human behaviour – in naturally occurring environments. Yet surprisingly, despite a number of important exceptions, including contributions to Leinhardt, Crowley and Knutson (2002), video is not widely used in museum visitor studies. Indeed, even when it does feature in studies of visitor behaviour it is primarily concerned with determining the character and quality of learning that arises, rather than with the ways in which the experience of museums and galleries arises in and through social interaction. It should be added that video rarely features in the substantial corpus of more applied studies that evaluate new museums and gallery spaces, studies not infrequently commissioned by the cultural institutions themselves or their funding bodies (Davies & Heath, 2013).

The relative disregard of video in studies of visitor behaviour becomes more curious still when one considers that there has been a considerable interest in the visual, namely photography and film in sociology (Harper, 2012), marketing (Schroeder, 2005) and anthropology (Banks & Morphy, 1999). The relative disregard of video in studies of visitor behaviour becomes more curious still when one considers that there has been a considerable interest in the visual, namely photography and film in sociology (Harper, 2012), marketing (Schroeder, 2005) and anthropology (Banks & Morphy, 1999). For example, in sociology an increasing number of researchers use video to enhance phenomenological approaches, such as Pink's (2007) phenomenological study of walking; Brown and Laurier (2005) analyse interaction around maps during car journeys; and the field of workplace studies is pervaded by video-based research and ethnographies that use video as a means to gain access to the details of action and interaction (Luff, Hindmarsh, & Heath, 2000; Engeström & Middleton, 1996). Whilst these sociological studies use video-recordings of naturally occurring situations produced for research purposes, there is a body of related research that examines videos created, for example, as part of religious events and

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3 rituals (Knoblauch & Schnettler, 2015; Raab, 2002). In the learning sciences and
4 education a substantial body of research has emerged that uses video to explore
5 cognitive developments in and out of the classroom (Goldman, Pea, Barron, & Derry,
6 2007)
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11 Save for this growing body of research in a range of disciplines, video also provides
12 novel analytic opportunities because it facilitates the repeated viewing and scrutiny of
13 action and interaction coupled with the deployment of still-frame and slow motion
14 analysis (Heath, Hindmarsh, & Luff, 2010). Rather than simply asking people what
15 they did and how they experienced a particular museum, gallery or exhibition, it
16 enables researchers to capture versions of the spoken and visible behaviour of visitors
17 and subject these recordings to repeated scrutiny using slow motion facilities and the
18 like. It enables researchers to develop and share a data corpus to which various
19 analytic interests can be brought to bear, and perhaps fundamentally, enables
20 colleagues and others (at least in live presentations) to assess the quality of the
21 insights and observations with regard to the raw data on which the analysis is based.
22 For those with more applied interests, audio-visual recordings, provide a critical
23 resource in demonstrating to interested parties such as designers, curators and
24 educationalists, the impact and implications of such matters as the layout of a gallery,
25 the information resources that accompany an exhibition, the character of the
26 interaction that is engendered by an ‘interactive’ and more generally the ways in
27 which people respond to exhibits and exhibitions.
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41 **Analytic considerations**

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43 Given the extraordinary potential of video for the analysis of human behaviour and
44 social interaction, the various social science communities might appear to be
45 somewhat reticent in exploiting the opportunities it affords. One suspects this
46 reticence derives more from the methodological and analytic challenges it poses
47 rather than the reluctance to use a newish technology for research – indeed - in
48 contrast the personal computer has proved an invaluable tool for the social sciences or
49 the collection, analysis and presentation of data. Over the last couple of decades
50 however we have witnessed the emergence of a growing corpus of video-based field
51 studies, studies that have examined social interaction in a substantial range of
52 environments including such settings as control centres, operating theatres and other
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3 medical consultations as well as behaviour in public and semi-public settings such as
4 museums and galleries (Heath, Hindmarsh, & Luff, 2010; Kissmann, 2009;
5 Knoblauch, Tuma, & Schnettler, 2013). These studies have drawn from analytic
6 developments within the social sciences, namely ethnomethodology (Garfinkel, 1967;
7 vom Lehn, 2014a) and conversation analysis (Sacks, 1992), developments that have
8 provided the resources to enable the detailed scrutiny of “multimodal”, i.e. talk,
9 bodily, material and visual, action, in naturally occurring environments (Mondada,
10 2011).

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13 In our research we draw on ethnomethodology and conversation analysis by orienting
14 to three basic analytic commitments that inform our video-based research of social
15 action and activity, commitments that have been derived from Garfinkel’s and Sacks’
16 writings. First and foremost, social action is ‘situated’, it arises in and is bound by the
17 context in which occurs, and action is both sensitive to, and contributes to the context
18 in which it arises. Secondly, social action contingently emerges in and through social
19 interaction, it is sensitive to the contributions of others and in turn provides the
20 resources and framework to which the actions of others are oriented. Thirdly, the
21 production of social action and interaction relies on taken-for-granted practices and
22 procedures, methods if you like, in and through which participants produce actions
23 that are recognizable, intelligible, to others – that is, practices that enable the
24 concerted and orderly accomplishment of ordinary everyday activities (vom Lehn,
25 2014a).

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28 There are two further commitments that are worthwhile mentioning at this stage.
29 Given the situated character of practical action, the ways in which it emerges in and
30 contributes to the context at hand, it is critical that analysis proceeds on a case-by-
31 case basis – examining the characteristics and organization of action and interaction
32 within the circumstances in which it arises. Secondly, social interaction is both a topic
33 and resource. It forms the principal focus for our analysis, for example in museums
34 and galleries the ways in which visitors both alone and with others orient to each
35 other’s action in navigating the space or looking at an object. It also provides an
36 analytic resource, providing an opportunity to examine how people orient to each
37 other’s actions as a way of examining how participants themselves treat and respond
38 to particular actions. In other words, the interactional character of social action
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provides a vehicle through we can begin to prioritize the participants’ perspective and begin to explore how they themselves produce actions with regard to the actions of others. In this regard, therefore, we can begin to recognise, why a case-by-case analysis that scrutinises how the location of actions and their design with regard to the emergent configuration of action and interaction, accomplished through multimodal action, is critical to understanding conduct and interaction and developing analysis and understanding (Heath, Hindmarsh, & Luff, 2010).

When using video-recordings as principal data it is worthwhile touching briefly on matters of data collection and analysis. In her discussion of humanistic inquiry Hirschman (1986) has raised some caution against the use of video in marketing research, in particular the possible reactivity of research subjects and ethical concerns. From our own experience we also are aware that generating high quality audio-visual recordings of visitor behaviour and interaction in public environments, such as museums and galleries poses a number of challenges. First and foremost it is critical to address the ethical issues that arise and in particular dealing with matters of informed consent. Over many years, in close consultation with the managers of a number of museums and galleries, and the relevant University committees, we have developed a number of procedures that address issues of consent and access to data. These include for example, informing visitors of the research, providing the opportunity for visitors to decline being recorded or to have relevant data destroyed at any stage after the event, to unambiguously state that the data will solely used for research and teaching purposes, and that no copies of the material would be available to anyone outside the direct research team. In practice, over many years we have had very few visitors that have had reservations or sought not to be recorded, indeed quite the contrary, visitors have shown much interest in the project and in many cases have been keen to participate.

With our interest in social interaction, it is critical that where possible we are able to include all the relevant participants to the activity within the range of camera and microphone. Depending on the character of the exhibits, for instance a painting as opposed to a multi-party interactive, the layout of the exhibition, and the navigation patterns of the visitors, we have tended to focus data collection on the activity that arises with and around particular exhibits. In some cases, we have been able to video

record action at a series of exhibits simultaneously, either by raising the camera or by using a number of cameras at successive locations. Securing good quality sound proves particularly challenging, since it is not unusual to find visitors talking very quietly in certain museums and galleries. To this end, we have increasingly used radio-microphones, either positioned near particular exhibits or in some cases worn by visitors. We find that before attempting any recording within a museum or gallery, it is critical to undertake field observation. It provides an opportunity to gain a sense of the patterns or action that arise in particular museum spaces, to identify potential areas of activity and interest, and to consider where it might be useful and relevant to gather recorded data and without the camera becoming too obtrusive.

With regard to Hirschman's (1986) critique of video as data, we agree that at times people orient to the camera. As we are interested in naturally occurring action and interaction we have taken care to exclude such events when the participants displayed a concern with the recording (cf. Laurier & Philo, 2006). Like other researchers who use video as the principal data for analysis, we find that people rarely react to the camera, and if they do, react to the camera in recognisable ways making it easy for us to exclude their action from the analysis. Moreover, when gathering video-data, we take precautions to minimise reactivity to the recording by not standing behind the camera and switching the red camera-light off during the recording.

The complexity of action that is found within even the briefest fragment of audio-visual recording can prove a daunting challenge to those unfamiliar with the analysis of such materials. Consider for example a few moments of action that may arise when a family are looking at a painting, in which they glance at the label, point to one or two features of the picture and remark and even discuss the scene, its provenance, composition and the like. In examining video-recorded fragments of interaction, it is crucial to begin to identify the actions that arise, how participants orient to prior action of co-participants, and how actions provide opportunities for subsequent action. Due to the detail of the analysis it is critical to transcribe the multimodal action that arises at and around the exhibit. The transcription captures, if only crudely, the emergent and sequential structures of the action and activity. It is not simply a way of representing the fragments, but an important analytic resource enabling the analyst to begin to explicate the organization of action and the practices, procedures

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and contingencies that inform its concerted production (Goodwin, 1981; Heath, Hindmarsh, & Luff, 2010; Mondada, 2013).

In the following, we will discuss three areas of video-based research in museums to illustrate the observations and findings of this approach and their implications for the design of new and novel exhibits and interpretation resources: mobility in exhibitions, experiencing exhibits and interactivity at exhibits.

Navigating exhibitions

In marketing and consumer research there has been a long-standing interest in tracking shoppers’ navigation of retail environments. In recent years, the tracking of shoppers in bricks and mortar and online retail environments has been enhanced through the development of novel tracking devices such as video- and eye-tracking systems as well as the tracking of mobile phone signals (Krafft & Mantrala, 2009; Valenti, Sebe, & Gevers, 2012). Whilst in retail and shopping domains tracking is used to enhance the shopping experience and the revenue for the retailer, in museums the tracking of visitors coupled with behavioural measures has been used to help enhance the effectiveness of exhibits as educational technologies (Screven, 1976).

When assessing the effectiveness of exhibits in their ability to attract and hold people’s attention and in facilitating learning in museums research often ignores to study how visitors organise their navigation and exploration of exhibitions. Instead it often ascribes the origin of people’s behaviour and of their cognitive response to exhibits and their design. Visitor research and evaluation therefore are pervaded by the use of measures like “attracting power”, the average number of people stopping at an exhibit, and “dwell time”, the time that visitors spend at an exhibit (Shettel, 2001).

By taking the view that people’s conduct is influenced or even determined by features of the environment visitor research ignores how people themselves do the organising of their visit. Rather than aligning with the view that people are influenced or determined in their behaviour by the environment when exploring exhibitions our studies are principally concerned with how people practically organise their movement along gallery walls, with when they withdraw from an exhibit and how then they organise the navigation to a next exhibit.

Our initial observations in museums suggested that people organise their onward movement to a next exhibit without disturbing other visitors and often without talking. The display that they are ready to withdraw from the exhibit in front and go elsewhere by virtue of often slight shifts in posture and visual orientation. The following fragment illustrates the practices through which visitors display to each other their readiness to leave an exhibit. The fragment begins when Pete and Rosy look at 18th century glass- and stoneware displayed in and in front of a large glass-case.

Image 1.1.**Image 1.2.****Image 1.3.**

The two participants stand side-by-side in front of the glass-case and look down to the sill outside the case where pieces of porcelain are laid out for visitors to examine (Image 1.1.). Having inspected the porcelain on the sill for a few moments, Pete without saying a word, first looks up, steps backwards and then lifts his upper body up while now looking to the objects in the glass-case. Pete's shift in orientation and step away from the case occasions the pair's departure from the exhibit (Image 1.2.). His bodily actions display a juncture in his engagement with the exhibit that engender a response from Rosy who immediately after Pete's step backward lifts her body up and also looks to the objects inside the glass-case. While changing her bodily and visual orientation to exhibit she steps backward and begins to turn to the right, thus also displaying a juncture in her engagement with the exhibit. Her shift in orientation encourage Pete to extend his movement away from the glass-case. As he turns away from the case Rosy aligns with his withdrawal until, shortly after, both participants leave the exhibit together (Image 1.3).

As visitors in other fragments in our collection Pete and Rosy leave the glass-case without talking. They do not vocally announce to each other they have seen enough of this exhibit but display their readiness to withdraw from the glass-case by progressively displaying that they are creating a distance to the exhibit and prepare to

leaving it. Although the participants do not talk the actions they produce to leave the exhibit are neatly organised and reveal the ongoing alignment of each other's orientation to the museum visit as a social occasion. Pete does not turn and leave the exhibit without considering his friend's continued orientation to the objects on the sill, and Rosy is sensitive to the juncture in her friend's engagement with the exhibit by stepping backward and displaying her readiness to withdraw from the case. Only when Rosy shifts her visual orientation from the sill to the case, begins to lift her body and steps backward Pete extends his withdrawal and turns away from the exhibit; a movement his friend a moment later aligns with.

The analysis of this fragment and a number of other fragments has important impact for the assessment of the effectiveness of exhibits as measured by indices like attracting and holding power. The two visitors' departure from the exhibit arises not because they have exhausted their interest in the porcelain on display but because one of them displays a readiness to leave. Alternative courses of action are imaginable, such as that Rosy stays behind for a bit to examine the exhibit further but they do not materialise. Instead, the visitors uphold the "With" (Goffman 1971) and continue their exploration of the museum together. As in many other fragments in our body of data, therefore the time the visitors spend at the exhibit and in the gallery is not determined by the exhibit but by the activities of other visitors, in this case a visitor who Pete has come with to the museum. In other cases, visitors stay at an exhibit because other people they are not with occupy the neighbouring exhibits (vom Lehn, Heath, & Hindmarsh, 2001; vom Lehn, 2013).

Concerted looking

Systems that track people's looking at objects, like eye trackers that are increasingly used in consumer research (Valenti, Sebe, & Gevers, 2012) and also in museum visitor research (Brieber, Nadal, Leder, & Rosenberg, 2014; Kirchberg & Tröndle, 2015; Tröndle, Greenwood, Bitterli, & van den Berg, 2014), enhance the opportunities of behavioural visitor research that Shettel (1976) had conducted some forty years ago. Yet, they are unable to explain how an experience of exhibits emerges in interaction between people. Visitor research and evaluation however today consider interaction and discussion as important contributors to cognitive development and learning and concern themselves with questions like how people

experience exhibits in talk and interaction in museums (Falk & Dierking, 2000). The interest of visitor research and evaluation is primarily directed at the outcome of the interaction, i.e. with what people have learned in and through their interactional engagement with exhibits in museums (Leinhardt, Crowley, & Knutson, 2002). They show little concern, however, with the interaction itself and how the exhibit features in the interaction.

The following fragment shows two visitors, Stacy and Jack, at a photograph in the Victoria and Albert Museum. The pair stand in front of one of the pieces when Jack looks up and moves his body slightly to the right (Image 2.1). Stacy treats her companion's change in orientation as a display of his readiness to move on, accepts this invitation and orients to the neighbouring piece. She then reveals that in her view the neighbouring exhibit is noteworthy by pointing at and describing it as "a great shot" and "fantastic" (Image 2.2). As Stacy voices her description of the photograph she shuffles to her right, closer to the piece followed by her companion while keeping her arm and forefinger stretched out pointing to the piece. Jack in turn moves over and leans close to the exhibit where he can see it and read the label on the wall beneath it (Image 2.3).

Image 2.1.

Image 2.2.

Image 2.3.



S: This is a great shot (.) he::re (.1) this is a fantastic shot

Although visitors to art exhibitions rarely talk much they do conduct action that makes others notice exhibits and exhibit features. Through their talk and bodily action, such as gesture and looking, they display where they orient and make observable how they see particular exhibit features for others. Thus, when looking at exhibits people often influence each other's action and orientation to the exhibit and encourage others to look at and discover exhibit features for themselves (cf. Heath &

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vom Lehn, 2004; vom Lehn, 2006). They also are drawn to exhibits or to examine particular exhibit features by virtue of the actions of people they are not with. Bitgood (2013) suggests that people may be drawn to exhibits when they notice these objects drawing attention of others. It also has been shown that people may look to specific exhibit features when they observe other people examining them (vom Lehn, Heath, & Hindmarsh, 2001). The fragment discussed here reveals that the design of exhibits does not determine how visitors experience them but the experience arises in interaction between visitors who draw on the visible resources provided by the museum. Thus, the interaction is an example of co-creation in practice.

Despite the growing recognition that museum visiting is a social occasion (Debendetti, 2003; Jafari, Taheri, & vom Lehn, 2013), curators and museum educators design and deploy information sources like labels, text-panels or more advanced systems near exhibits that disseminate information for individuals to use when looking at an original object. Research has shown that visitors use this information. They not only read labels, but also text in labels “echoes” in visitors’ conversations (McManus, 1989). Building on McManus’ observation research also has shown that people use labels and portable gallery-cards as well as information delivered on information kiosks and such like to configure the experience of others (Heath & vom Lehn, 2004). Couple with the current popular concern with communication and interaction with and through social media and related technologies it would seem timely to develop systems and devices as well as other kinds of resources that do not prioritise the information retrieval by individuals but instead allow people to embed information seamlessly within their interaction and communication with others.

Interactivity or Social Interaction

Over the past couple of decades shops and retail environments as well as museums, galleries and science centres have deployed novel systems and devices into their public domains. These technologies range from display technologies like digital advertisement systems to touch-screen systems and mobile devices to help people navigating and making sense of the space and the objects on display (Jones, Hillier, & Comfort, 2005; Meuter, Ostrom, Roundtree, & Bitner, 2000; Parry, 2010).

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3 In many museums today, the deployment of these systems and installations has been
4 motivated by managers and curators who hope that such technology, be it stationary
5 or mobile, will address people's needs and expectations better than conventional
6 display techniques (Tallon & Walker, 2008). Interactives such as touch-screen
7 systems that, it is hoped, convey ideas, concepts or information by involving visitors
8 in activities (Bradburne, 2000). Some of these interactives are information stations
9 that stand either alone or close to an original artefact they hold information on. Other
10 interactives are exhibits in their on right. They involve people in games or game-like
11 activities related to an exhibition theme.
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20 Despite this difference in content the systems generally are operated in similar ways
21 through touch-screen interfaces. The screens tend to be of standard size, often not
22 much larger than conventional desktop displays. The size of the displays together with
23 the design of the content can make it difficult for pairs and small groups of visitors to
24 engage with the interactives together. Interactives that have been deployed more
25 recently try to overcome this problem. They use technologies, such as relatively large
26 displays, more flexible interfaces such as motion sensors that facilitate or at least
27 allow for collaborative activities.
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35 One such exhibit is shown in image 3.1 and 3.2. The exhibit is called Space Probe and
36 has been deployed in an interactive exhibition associated with an Observatory. It is
37 made up of three individual touch-screen systems linked to a large display in front.
38 Visitors engaging with the exhibit become involved in a collaborative activity with
39 the aim to launch a probe into space. As they begin their participation in the activity
40 they are assigned a functional role in the process that requires them to select certain
41 instruments and devices by touching the screen. If the three players chose the right
42 combination of technologies the probe is successfully launched into space. The
43 success or failure of the mission is publicly displayed on the large screen
44 accompanied by announcements audible across the gallery.
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Image 3.1



Image 3.2.



When visitors arrive at Space Probe they spread across the three touch-screen systems and individually follow the instructions on screen. In cases where only two people arrive at the exhibit the computer takes over the activities of the missing operator. Image 3.1. shows three siblings engaged with Space Probe. They stand at the three workstations and operate them according to the system's instructions. As the process moves forward the girl on the left workstation hesitates and displays uncertainty about the next action, thus putting the group effort of launching the probe into space in danger. When the older boy to her right notices her hesitation he first looks over and then leans across to operate the system on his sister's behalf (Image 3.2.).

Space Probe is an example for an interactive installation that provides an activity for the involvement of multiple visitors at the same time. The activity to launch the probe into space entails the potential for collaboration between three players and might encourage discussion about the right choice of tools for the mission. Yet, the designers of Space Probe had to address a common concern amongst museum managers, namely that multiplayer exhibits have to work also for individual visitors. This requirement that museum managers voice over and over when discussing the development of novel, multi-player interactives actually can undermine the design of exhibits that facilitate more complex forms of interaction and collaboration (Heath & vom Lehn, 2008, 2010; vom Lehn & Heath, 2005).

The exhibits are seen as relatively successful with visitors as they attract large numbers of visitors who stay with the activity for much longer than with conventional

static exhibits. Audio-/video-recording allow us to explore in some detail the activities and interaction arising at these exhibits. It often transpires that the size of the interfaces through which the exhibits are operated coupled with the structure of the activity at the exhibits undermines the emergence of social interaction. Visitors become involved in the operation of the exhibit, but the activity at the exhibit does not allow or encourage the inclusion of other people. Thus, participation in the activities at computer-based exhibits becomes a tier-based organisation, with a principal user at the interface and participants observing the action from the second and third tier (Heath & vom Lehn, 2008; Meisner et al., 2007).

Theoretical and Methodological Contributions

We began this article by suggesting that video provides unprecedented opportunities to examine and understand people's behaviour in museums and galleries. Perhaps most importantly, video provides a unique opportunity to begin to explicate the qualities and characteristics of action and interaction that arise in museums and galleries – to come to understand, in a systematic fashion, what people say and do and to explore the ways in which engagement and participation arise in and through social interaction. Video, therefore, allows the investigation of aesthetic and cultural experience that emerge from the interaction between people within a multisensory environment. It provides access to how people through their action and interaction explore, examine and make sense of exhibits, and how they display their experience through embodied action to all those in perceptual range

The paper thus contributes to studies in experiential and sensory marketing (Schmitt, 1999; Hultén, 2015) that began more than 30 years ago and now are further developed for the study of the consumer experience in aesthetic and other environments (Pine & Gilmore, 1999; Havlena & Holbrook, 1986; Hirschman, 1983; Joy, & Sherry, 2003). This body of research primarily considers aesthetic experiences as subjective phenomena. Our analysis suggests that experiences are often achieved in interaction between people; what object people look at and how they see it, is not defined by the features and elements of the material and visual environment, but it emerges in interaction with others. The concern with the social and interactional achievement of experience requires research methods that allow access to the fine detailed organisation of action and interaction. Scholars who focus on subjective and cognitive

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aspects of experience have often relied on diary methods and subjective personal introspection (SPI) (Hart, Kerrigan, & vom Lehn, 2016; Holbrook, 2006). It however is difficult for scholars using phenomenology-based approaches (Honer & Hitzler, 2015) to uncover circumstances in which such experiences arise. By video-recording social situations, for example in museums and galleries, we are able to at least save versions of situations in which experiences arise and subject them to detailed social-scientific scrutiny. When deploying an analytic framework, like that offered by ethnomethodology and conversation analysis, we can recover the organisation of actions through which people make experiences and display their experiences to others;- for example by showing another what one has identified as a noteworthy object in a photograph.

We believe that audio-visual recordings coupled with relevant analytic resources can begin to provide a distinctive approach to understanding visitor behaviour and generate a corpus of findings that can bear upon such matters as the design of new museum spaces, the creation of material and digital information resources, and the forms of action and interaction prescribed or enabled by complex interactive exhibits. Video provides an opportunity for close looking, for beginning to understand and explicate the organisation of action at the exhibit-face and to expose the ways in which the experience of exhibits and exhibitions arises in and through social interaction - be it between those who are together or those who just happen to be in the same space.

Despite our enthusiasm for video as principal data we are aware that for many research questions video-recording alone will be insufficient as data because aspects of the consumption experience are not accessible or intelligible to the researcher using video. In such cases, it is worthwhile to consider how the analysis of the video-data can be supplemented and augmented by other forms of data, such as subjective personal inspection, diary studies, ethnographic field observation and interviews as well as possibly by video-elicitation interviews. Some such combinations of video with other data sources have been tried, for example, in the learning sciences (Goldman et al. 2014).

Managerial Implications

Video provides an important resource to reveal how museum visitors navigate and explore, examine and make sense of aspects of multisensory environments. Aside from the more academic application of audio-visual recording technologies to analyse the conduct and interaction of visitors, video can provide an important resource for managers and designers of these environments. Many institutions commission, on a relatively regular basis, summative evaluations of exhibitions and gallery spaces. In some cases these evaluations do provide findings that inform the design of subsequent developments and enable the creation of more general data corpus, but to a large extent it is found that the reports prove, for organisational reasons, ineffectual, and there is little accumulation of data and findings (Davies & Heath, 2013). A corpus of video recordings of museums and gallery spaces, before and after their (re)development could provide an important resource when considering the design of new exhibition spaces and reflecting the implications and impact of previous design decisions. Indeed, such material could be of some importance not only for designers and curators, but also for those interested in the development of information resources and learning programmes.

For marketing and consumer researchers the use of video as data is not new. In fact, scholars and practitioners in the field have long recognised that visual data, such as photographs and video-recordings, are powerful tools to track people and assess their engagement with and experience of the objects and displays (cf. Belk & Kozinets, 2005; Berger, 2015; Schroeder, 2005). Yet, the focus of consumer research and visitor research alike has been primarily on the individual, whilst ignoring how social interaction influences people's engagement with and experience of exhibits.

In this article, we have used museum exhibitions as a domain where the interactional emergence of experience in multisensory environments can be explored. The analysis of fragments of interaction video-recorded at exhibits draws attention to the importance of social interaction for the emergence of experiences. It is in and through social interaction that people experience and make sense of multisensory environments like museums. Hence, managers and designers of such environments could benefit from detailed information on how people orient to each other when navigating and exploring them and how they embed their orientation to aspects of the

environment, including exhibits, goods and products, advertisement, labels and other information material within their interaction. Comparable research in other consumption environments is required to find out if similar forms of cooperation between people emerges, for example, in shopping and retail environments, and how the interaction with sales and service personnel plays into the emergence of consumers' experience.

Bibliography

Banks, M., & Morphy, H. (1999). *Rethinking Visual Anthropology*. New Haven and London: Yale University Press.

Belk, R. W., & Kozinets, R. V. (2005). Videography in marketing and consumer research. *Qualitative Market Research: An International Journal*, 8(2), 128–141. doi:10.1108/13522750510592418

Belk, R. W., Sherry, Jr., J. F., & Wallendorf, M. (1988). A naturalistic inquiry into buyer and seller behavior at a swap meet. *The Journal of Consumer Research*, 14(4), 449–470.

Berger, A. A. (2015). *Ads, Fads, and Consumer Culture: Advertising's Impact on American Character and Society*. Lanham, MA: Rowman & Littlefield Publishers.

Bitgood, S. (2013). *Attention and Value: Keys to Understanding Museum Visitors*. Walnut Creek: Left Coast Press.

Bradburne, J. M. (2000). *Interaction in Museums. Observing Supporting Learning*. Libri Books on Demand.

Brieber, D., Nadal, M., Leder, H., & Rosenberg, R. (2014). Art in Time and Space: Context Modulates the Relation between Art Experience and Viewing Time. *PLoS ONE*, 9(6), e99019. doi:10.1371/journal.pone.0099019

Brown, B., Laurier, E., Lorimer, H., Jones, O., Juhlin, O., Perry, M., ... Weilenmann, A. (2008). Driving and “passenger” : notes on the ordinary organization of car travel. *Mobilities*, 3(1), 1–31. doi: 10.1080/17450100701797273

Caru, A., & Cova, B. (2006). *Consuming Experience*. (A. Caru & B. Cova, Eds.). Routledge.

Clark, C., Drew, P., & Pinch, T. (1994). Managing Customer ‘Objections’ during Real-Life Sales Negotiations. *Discourse & Society*, 5(4), 437–462. doi:10.1177/0957926594005004002

- Clark, C., & Pinch, T. (2009). Some “major” organisational consequences of some “minor” organised behaviour: a video analysis of pre-verbal service encounters in a showroom retail store. In N. Llewellyn & J. Hindmarsh (Eds.), *Organisation, interaction and practice: Studies in ethnomethodology and conversation analysis* (pp. 140–171). Cambridge: Cambridge University Press.
- Davies, M., & Heath, C. (2013). “Good” organisational reasons for “ineffectual” research: Evaluating summative evaluation of museums and galleries. *Cultural Trends*, 23(1), 1–13. doi:10.1080/09548963.2014.862002
- Debenedetti, S. (2003). Investigating the Role of Companions in the Art Museum Experience. *International Journal of Arts Management*, 5(3), 52–63.
- Engestrom, Y., & Middleton, D. (1998). *Cognition and Communication at Work*. Cambridge: Cambridge University Press.
- Falk, J., & Dierking, L. (1992). *The Museum Experience*. Washington: Left Coast Press.
- Falk, J., & Dierking, L. (2000). *Learning from Museums: Visitor Experiences and the Making of Meaning* (American Association for State and Local History Book Series). Lanham, MA: AltaMira Press/U.S.
- Garfinkel, H. (1967). *Studies in Ethnomethodology*. Cambridge: Polity Press.
- Gilman, B. I. (1916). Museum Fatigue. *Scientific Monthly*, 2(1), 62–74.
- Goffman, E. (1971). *Relations in Public*. London and New York: Basic Books.
- Goldman, R., Barron, B., Pea, R., & Derry, S. (2007). *Video Research in the Learning Sciences*. Los Angeles & London: LEA.
- Goodwin, C. (1981). *Conversational Organisation: Interaction between Speakers and Hearers*. New York, London et al.: Academic Press.
- Goulding, C. (1999). Contemporary Museum Culture and Consumer Behaviour. *Journal of Marketing Management*, 15(7), 647–671. doi: 10.1362/026725799785037003
- Goulding, C. (2000). The museum environment and the visitor experience. *European Journal of Marketing*, 34(3/4), 261–278. doi: 10.1108/03090560010311849
- Harper, D. (2012). *Visual Sociology*. London and New York: Routledge.
- Hart, A., Kerrigan, F., & vom Lehn, D. (2016). Experiencing Film: Subjective Personal Introspection and Popular Film Consumption. *International Journal of Research in Marketing*. doi:10.1016/j.ijresmar.2015.08.005

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Havlena, W. J., & Holbrook, M. B. (1986). The Varieties of Consumption Experience: Comparing Two Types of Typologies of Emotion in Consumer Behavior. *Journal of Consumer Research*, 13(December), 394–404.

Heath, C., Hindmarsh, J., & Luff, P. Video in Qualitative Research (2010). London & New York: Sage.

Heath, C., & vom Lehn, D. (2004). Configuring Reception: (Dis-)Regarding the “Spectator” in Museums and Galleries. *Theory, Culture & Society*, 21(6), 43–65. doi:10.1177/0263276404047415

Heath, C., & vom Lehn, D. (2008). Configuring “Interactivity”: Enhancing Engagement in Science Centres and Museums. *Social Studies of Science*, 38(1), 63–91. doi:10.1177/0306312707084152

Heath, C., & vom Lehn, D. (2010). Interactivity and Collaboration: new forms of participation in museums, galleries and science centres. In R. Parry (Ed.), *Museums in a Digital Age* (pp. 266–280). Milton Park: Routledge.

Hirschman, E. C. (1986). Humanistic Inquiry in Marketing Research: Philosophy, Method, and Criteria. *Journal of Marketing*, 23(3), 237–249. doi:10.2307/3151482

Hirschman, E. C. (1983). Aesthetics, Ideologies and the Limits of Marketing Concept. *Journal of Marketing*, 47(3), 45–55. doi: 10.2307/1251196

Holbrook, M. (2006). Consumption experience, customer value, and subjective personal introspection: An illustrative photographic essay. *Journal of Business Research*, 59(6), 714–725. doi:10.1016/j.jbusres.2006.01.008

Honer, Anne, and Ronald Hitzler. 2015. “Life-World-Analytical Ethnography: A Phenomenology-Based Research Approach.” *Journal of Contemporary Ethnography*. 44(5), 544-562. doi:10.1177/0891241615588589.

Hultén, B. (2015). *Sensory Marketing: Theoretical and Empirical Grounds*. London et. al.: Taylor & Francis.

Jafari, A., Taheri, B., & vom Lehn, D. (2013). Cultural consumption , interactive sociality, and the museum. *Journal of Marketing Management*, 29(15-16), 1729–1752. doi: 10.1080/0267257X.2013.811095

Jerolmack, C., & Khan, S. (2014). Talk Is Cheap: Ethnography and the Attitudinal Fallacy. *Sociological Methods & Research*, 43(2), 178–209. doi:10.1177/0049124114523396

Jones, P., Hillier, D., & Comfort, D. (2005). The benefits, challenges and impacts of radio frequency identification technology (RFID) for retailers in the UK. *Marketing Intelligence & Planning*, 23(4), 395–402. doi:10.1108/02634500510603492

- Joy, A., & Sherry, J. J. (2003). *Speaking of Art as Embodied Imagination: A Multisensory Approach to Understanding Aesthetic Experience*. *Journal of Consumer Research*. doi:10.1086/376802
- Kerrigan, F. (2010). *Film Marketing*. Amsterdam et al.: Elsevier.
- Kerrigan, F., Fraser, P., & Özbilgin, M. (Eds.) (2004). *Arts Marketing*. London et al.: Elsevier.
- Kirchberg, V., & Tröndle, M. (2015). The Museum Experience: Mapping the Experience of Fine Art. *Curator: The Museum Journal*, 58(2), 169–193. doi:10.1111/cura.12106
- Kissmann, U. T. (2009). *Video Interaction Analysis. Methods and Methodology*. Frankfurt a. M. et al.: Peter Lang.
- Knoblauch, H., & Schnettler, B. (2015). Video and Vision: Videography of a Marian Apparition. *Journal of Contemporary Ethnography*, 44(5), 636–656. doi:10.1177/0891241615587379
- Knoblauch, H., Tuma, R., & Schnettler, B. (2013). *Videography. Introduction to Interpretive Videoanalysis of Social Situations*. Wiesbaden: Peter Lang.
- Krafft, M., & Mantrala, M. K. (2009). *Retailing in the 21st Century: Current and Future Trends*. New York: Springer.
- Laurier, E., & Philo, C. (2006). Natural Problems of Naturalistic Video Data. In B. Schnettler, H.-G. Soeffner, H. Knoblauch, & J. Raab (Eds.), *Video-Analysis: Methodology and Methods* (pp. 183–192). Frankfurt am Main: Peter Lang.
- Laursen, D. (2012). Co-participation among school children around a computer-based exhibit. *Social Studies of Science*. doi:10.1177/0306312712455114
- Leinhardt, G., Crowley, K., & Knutson, K. (2002). *Learning Conversations in Museums*. Mahwah, NJ: LEA.
- Llewellyn, N. (2011). The gift in interaction: a study of “picking-up the bill.” *The British Journal of Sociology*, 62(4), 718–738. doi:10.1111/j.1468-4446.2011.01388.x
- Llewellyn, N., & Burrow, R. (2008). Streetwise sales and the social order of city streets. *British Journal of Sociology*, 59(3), 561–583. doi:10.1111/j.1468-4446.2008.00208.x
- Luff, P., Hindmarsh, J., & Heath, C. (2000). *Workplace Studies. Recovering Work Practice and Informing System Design*. Cambridge: Cambridge University Press.
- McManus, P. (1989). Oh yes, they do: How museum visitors read labels and interact with exhibit text. *Curator*, 32(3), 174–180.

- Meisner, R., Lehn, D. Vom, Heath, C., Burch, A., Gammon, B., & Reisman, M. (2007). Exhibiting Performance: Co-participation in science centres and museums. *International Journal of Science Education*, 29(12), 1531–1555. doi:10.1080/09500690701494050
- Meuter, M. L., Ostrom, A. L., Roundtree, R. I., & Bitner, M. J. (2000). Self-Service Technologies: Satisfaction with Technology-Based. *Journal of Marketing*, 64(July), 50–64. doi:10.1509/jmkg.64.3.50.18024
- Mondada, L. (2013). Embodied and spatial resources for turn-taking in institutional multi-party interactions: Participatory democracy debates. *Journal of Pragmatics*, 46(1), 39–68. doi:10.1016/j.pragma.2012.03.010
- Mondada, L. (2011). Understanding as an embodied, situated and sequential achievement in interaction. *Journal of Pragmatics*, 43(2), 542–552. doi:10.1016/j.pragma.2010.08.019
- O'Reilly, D. & Kerrigan, F. (Eds.) (2010). *Marketing the Arts. A fresh Approach*. London and New York: Routledge.
- Parry, R. (2010). *Museums in a Digital Age*. London & New York: Routledge.
- Pine, J. B., & Gilmore, J. H. (1999). *The Experience Economy*. Cambridge, MA: Harvard Business School Press.
- Pink, S. (2007). Walking with video. *Visual Studies*, 22(3), 240–252. doi:10.1080/14725860701657142
- Prentice, R. C., Witt, S. F., & Hamer, C. (1998). Tourism as experience. *Annals of Tourism Research*, 25(1), 1–24. doi:10.1016/S0160-7383(98)00084-X
- Raab, J. (2002). “Der schönste Tag des Lebens” und seine Überhöhung in einem eigenwilligen Medium. Videoanalyse und sozialwissenschaftliche Hermeneutik am Beispiel eines professionellen Hochzeitsvideofilms. *Sozialer Sinn*, 3, 469–495.
- Sacks, H. (1992). *Lectures on Conversation* (Vol. I). Oxford: Blackwell Publishing.
- Schmitt, B. H. (1999). *Experiential Marketing: How to Get Customers to Sense, Feel, Think, Act, and Relate to Your Company and Brands*. New York: Free Press
- Schroeder, J. (2005). *Visual Consumption*. London and New York: Routledge.
- Screven, C. G. (1976). Exhibit Evaluation: A goal-referenced approach. *Curator*, 52(9), 271–290.
- Shettel, H. (1976). *An evaluation of visitor response to “Man in his Environment.”* Washington D.C. (unpublished report).

- Shettel, H. (2001). Do we know how to define exhibit effectiveness? *Curator*, 44(4), 327–334. doi: 10.1111/j.2151-6952.2001.tb01173.x
- Tallon, L., & Walker, K. (2008). *Digital Technologies and the Museum Experience: Handheld Guides and Other Media*. Plymouth: AltaMira Press.
- Tröndle, M., Greenwood, S., Bitterli, K., & van den Berg, K. (2014). The effects of curatorial arrangements. *Museum Management and Curatorship*, 29(2), 140–173. doi:10.1080/09647775.2014.888820
- Valenti, R., Sebe, N., & Gevers, T. (2012). What Are You Looking at? *International Journal of Computer Vision*, 98(3), 324–334. doi:10.1007/s11263-011-0511-6
- vom Lehn, D. (2014a). *Harold Garfinkel: The Creation and Development of Ethnomethodology*. Walnut Creek, CA: Left Coast Press.
- vom Lehn, D. (2014b). Timing is money: managing the floor in sales interaction at street-market stalls. *Journal of Marketing Management*, 1–19. doi:10.1080/0267257X.2014.941378
- vom Lehn, D. (2013). Withdrawing from Exhibits: the interactional organisation of museum visits. In P. Haddington, L. Mondada, & M. Nevile (Eds.), *Interaction and Mobility: Language and the Body in Motion*. Berlin: de Gruyter, 65-90.
- vom Lehn, D. (2010). Examining “Response”: Video-based Studies in Museums and Galleries. *International Journal of Culture, Tourism and Hospitality Research*, 4(1), 33–43.
- vom Lehn, D. (2006). Embodying experience: A video-based examination of visitors’ conduct and interaction in museums. *European Journal of Marketing*, 40(11/12), 1340–1359. doi:10.1108/03090560610702849
- vom Lehn, D., & Heath, C. (2005). Rethinking interactivity : design for participation in museums and galleries. In L. Bannon, L. Ciolfi, & T. Hall (Eds.), *Rethinking Interactivity*. Limerick: University of Limerick. <http://www.idc.ul.ie/museumworkshop/Papers/vom%20lehnetAl.pdf>
- vom Lehn, D., Heath, C., & Hindmarsh, J. (2001). Exhibiting interaction: Conduct and collaboration in museums and galleries. *Symbolic Interaction*, 24(2), 189–216.
- Waidacher, F. (1996). *Handbuch der Allgemeinen Museologie*. Wien, Koeln, Weimar and Bochlau: Bochlau-Verlag.
- Wallendorf, M., & Belk, R. W. (1989). Assessing Trustworthiness in Naturalistic Consumer Research. In *SV - Interpretive Consumer Research* (pp. 69–84). Provo, Utah: Association for Consumer Research.